Report

MBus Decoder Task

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Steps followed in analysing and solving the task

Step 1:

The 1st two bytes of the array is encoded with manufacturer name, lets understand the encoding consider the given example **DME**.
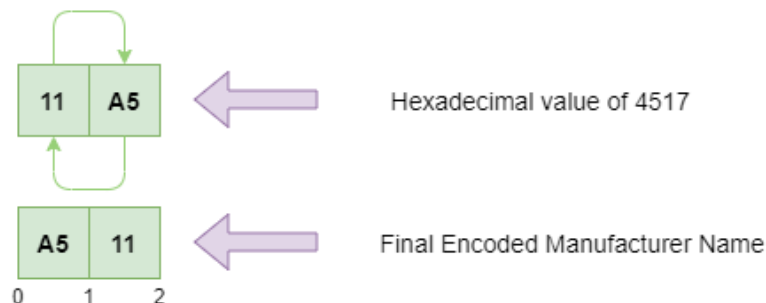

The manufacturer name is coded using the following formula:

Manufacturer = [ASCII(1st letter) - 64] · 32 · 32
+ [ASCII(2nd letter) - 64] · 32
+ [ASCII(3rd letter) - 64]

For the Given example the value will be:

Manufacturer = [68 - 64] · 32 · 32
+ [77 - 64] · 32
+ [69 - 64]

= 4517

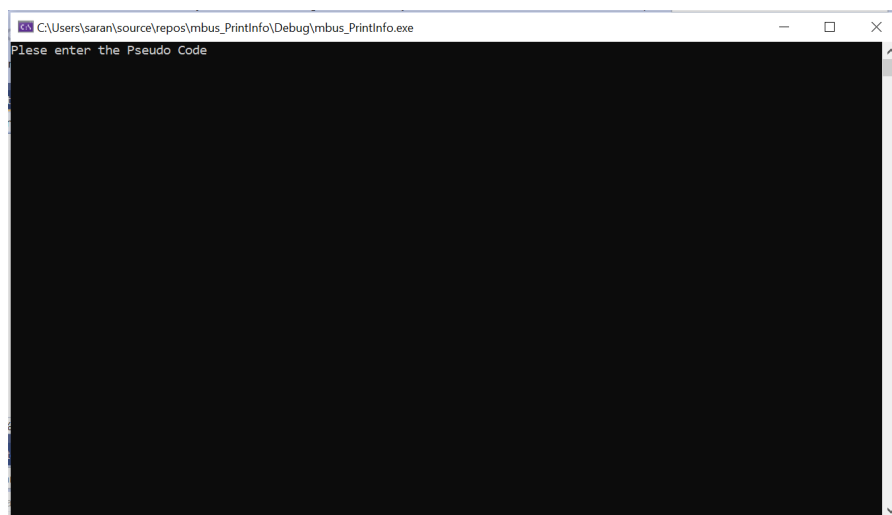The Hexadecimal equivalent of above-obtained value will be.

Step 2:

The last 4 bytes of the array i.e. 2nd byte to 5th byte consists of the Serial Number. Let's understand the encoding as per the given example i.e **70600506**.
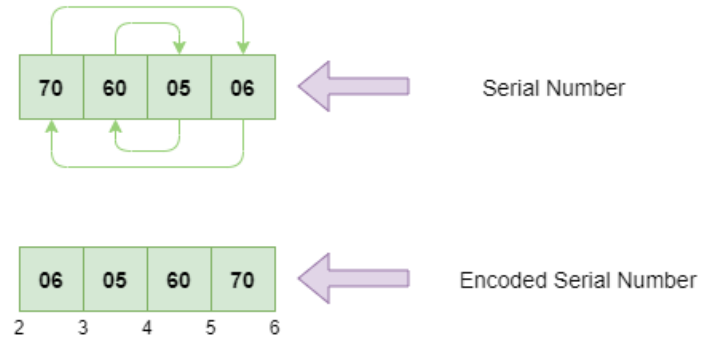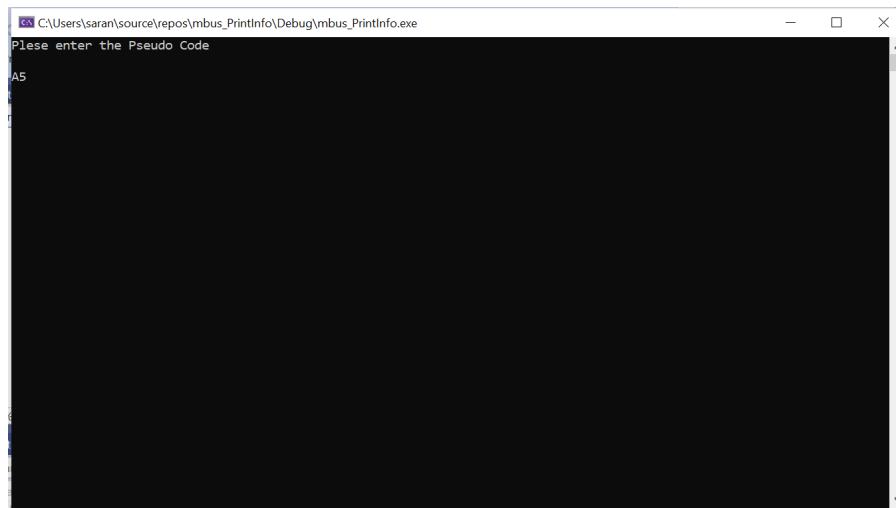

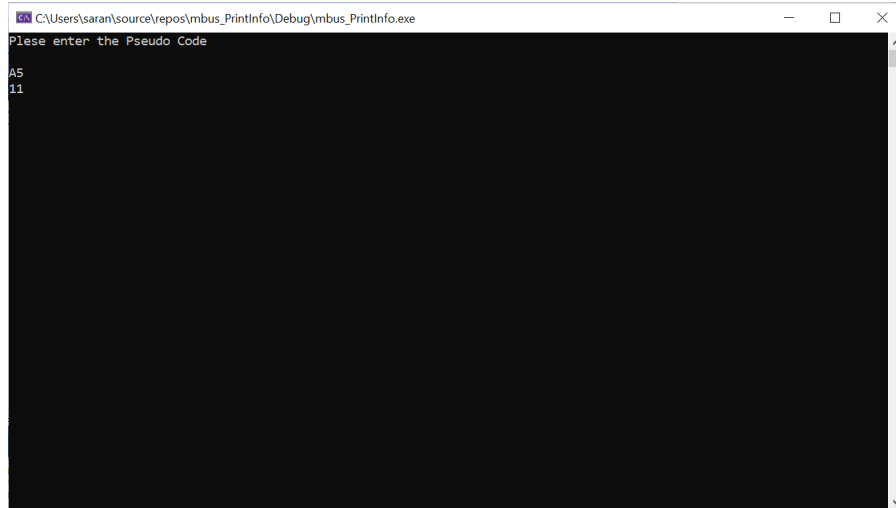**Description of how the source code was tested.**
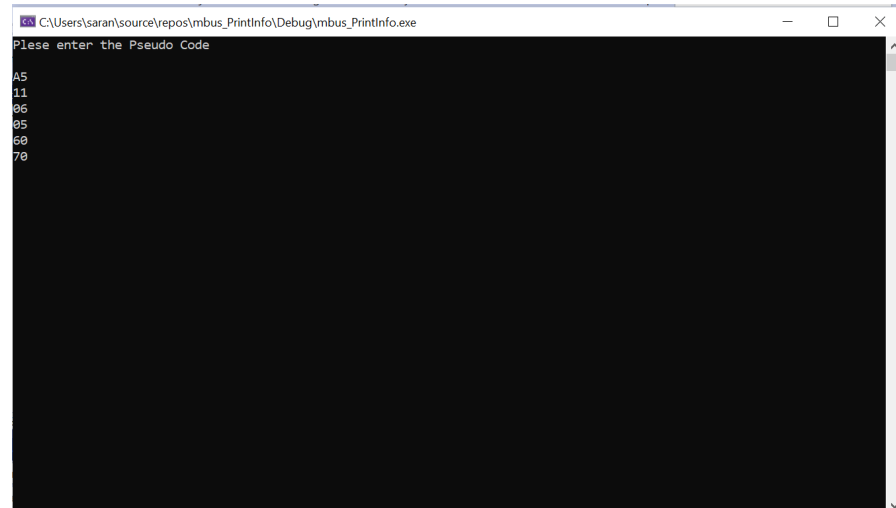
1) The user will be prompted to give the input

2) Press enter after giving values of each array element as shown below:
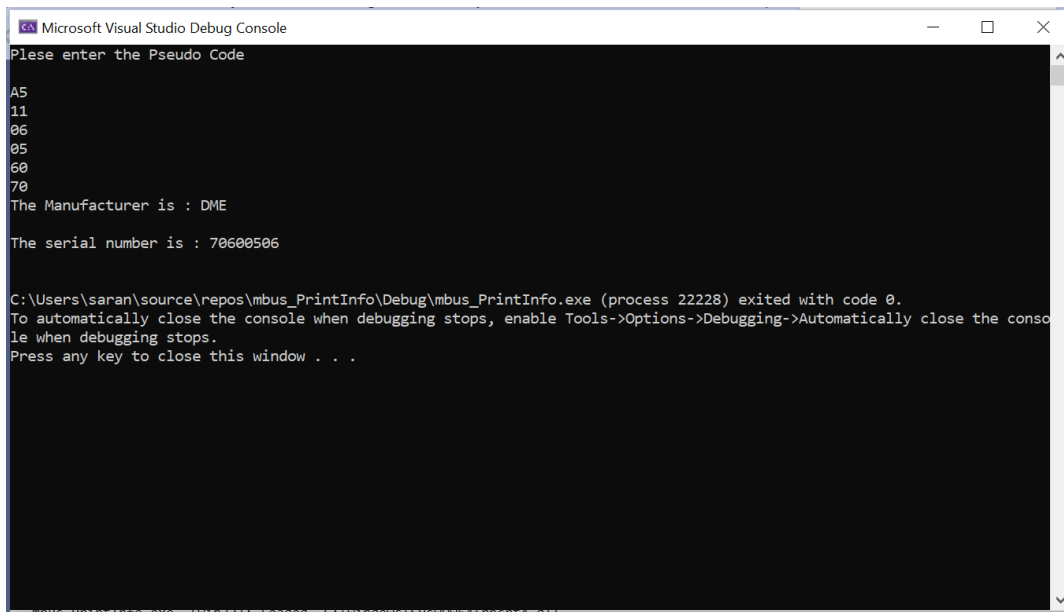
3) The Output in Human Readable format is obtained as shown below:

4) The program will print out the manufacturer name and serial number for any valid hexadecimal data given by the user as shown in the above example.